REMARKS

In the Office Action, the Examiner requested that the first paragraph of the body of the disclosure be updated. Applicants have amended the disclosure to indicate the related application number and filing date. The Examiner also requested that replacement drawings be submitted by Applicants. Formal drawings are submitted herein.

Claims 1-13 are pending in the present application. Claims 1-13 were objected to because of a number of informalities. The Examiner's objections will be addressed individually below.

With regard to independent claim 1, the Examiner suggested that the claim be amended to set forth "selecting one of orthogonal coding or beamforming for transmitting." Applicants respectfully submit that amending the claim as suggested by the Examiner would unduly limit the present invention. In some embodiments, both orthogonal coding and beamforming may be used for transmitting. Thus, Applicants respectfully submit that the present wording of claim 1 accurately depicts the scope of the present invention.

With regard to claims 5-8, Applicants have amended the claims to correct typographical errors and to improve clarity of the claim language.

For at least the aforementioned reasons, Applicants respectfully request that the Examiner's objections to claims 1-13 be withdrawn.

In the Office Action, claims 4-5 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

With regard to claim 4, the Examiner alleges that the claim is indefinite because the term "estimated" has "several interpretations" and "one skilled in the art is unable to determine the

particular method" by which the phase correlation coefficient should be estimated. applicants respectfully disagree and note that techniques for determining an estimate of a channel correlation on a reverse link are described at least in lines 23-32 on page 9 of the specification. Thus, those skilled in the art will appreciate that at least the techniques described in the specification and equivalent techniques may be employed.

With regard to claim 5, the Examiner alleges that the claim is indefinite because one skilled in the art would be unable to determine which correlation between the received signals should be used. Applicants respectfully disagree and note that the specification describes using an autocorrelation between the received signals in one embodiment. See Patent Application, pg. 9, ll. 23-32. Moreover, Applicants respectfully submit that restricting claim 5 to a single embodiment would unduly limit the present invention.

For at least the aforementioned reasons, Applicants respectfully request that the Examiner's rejections of claims 4-5 under 35 U.S.C. § 112, second paragraph, be withdrawn.

In the Office Action, claims 1, 2, and 5-13 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Harrison (U.S. Patent No. 6,154,485). Claims 3-4 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Harrison in view of Forssen, et al (U.S. Patent No. 6,173,014) The Examiner's rejections are respectfully traversed.

Harrison is concerned with receiving signals using combined orthogonal transmit diversity and adaptive array techniques. Harrison describes a coefficient α that may allow a base transmitter to smoothly transition between orthogonal transmit diversity mode and adaptive array mode. This smooth transition may allow the base transmitter to smoothly disable the adaptive array mode in proportion to the degradation of the quality of feedback data from a receiver. See Harrison, col. 8, ll. 23-35. However, Harrison does not describe or suggest determining at least

one correlation coefficient between *received* signals from at least two antennae, as set forth in independent claim 1. For at least this reason, Applicants respectfully submit that claim 1 and all claims depending therefrom are not anticipated by Harrison and request that the Examiner's rejections of claims 1-2 and 5-13 under 35 U.S.C. 102(e) be withdrawn.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of Harrison or Forssen, either alone or in combination. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. As discussed above, Harrison fails to teach or suggest determining at least one correlation coefficient between received signals from at least two antennae, as set forth in independent claim 1. The Examiner admits that Harrison also fails to teach or suggest determining at least one phase correlation coefficient, and so the Examiner relies upon Forssen to teach the use of amplitude and phase information to create a beam. However, Forssen fails to remedy the fundamental deficiencies of Harrison discussed above with respect to claim 1. Furthermore, the cited references fail to provide any suggestion or motivation to modify the prior art to arrive at applicants claimed invention.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not obvious over Harrison or Forssen, either alone or in combination. Applicants respectfully request that the Examiner's rejections of claims 3-4 under 35 U.S.C. 103(a) be withdrawn.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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Mark W. Sincell, Ph.D.
Reg. No. 52,226
Williams Morgan & Amerson, P.C.
10333 Richmond Avenue, Suite 1100
Houston, TX 77042
(713) 934-7000
(713) 934-7011 (Fax)

AGENT FOR APPLICANTS